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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/695,140	10/25/2000	Rinya Takesue	Q61468	3589

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EXAMINER

BUTTNER, DAVID J

ART UNIT PAPER NUMBER

1712

DATE MAILED: 11/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/695,140

Applicant(s)

TAKESUE ET AL.

Examiner

David Buttner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-18 and 22-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-16, 18, 22-27 is/are rejected.
- 7) ☒ Claim(s) 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

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Claims 12, 13, 15, 16, 18 and 22-27 rejected under 35 U.S.C. 103(a) as being unpatentable over the Statz 2002/0091188 publication in view of Sullivan '831.

Statz claims (#8) blends of E/acid or E/acid/acrylate copolymer, an organic acid, thermoplastic elastomer and cation source as cores or mantles or one-piece golf balls. Examples 10a, 10b and 10c use stearic acid and inorganic metal in amounts corresponding to applicant's claims and with the appropriate melt index. The acid copolymer may also be partially neutralized beforehand (paragraph 46). Note that applicant's blend of un-neutralized E/acrylate/acid(A1) +neutralized E/acrylate/acid (A2) is equivalent to a single lower neutralized E/acrylate/acid. Application 9/422142 filed 10/21/99 has basis for these limitations. The provisional applications have not been reviewed. Statz '571 (Col 4 line 57-69) can be cited for a discussion of metal lability in ionomers. Claims 25-27's "stretching vibrations" are merely a measure of %neutralization (page 10 line 26-34 of spec). The reference's high neutralization must inherently have the required "stretching vibration".

Statz does not list applicant's preferred inorganic cation sources (c), although any source (paragraph 46) is usable.

Sullivan (table 4) lists a number of cation sources for neutralizing ionomers. It would have been obvious to use NaOH, MgO etc. to supply the metal ions called for by Statz.

Claims 12-15,22,23,25 and 26 rejected under 35 U.S.C. 103(a) as obvious over the Chen '321 Patent in view of Sullivan '831.

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Chen adds stearic acid or metal stearates to ethylene/acid/acrylate ionomers to form golf ball cores, mantles, covers or one-piece balls (see claims). This is the same final product as produced by applicant's "post neutralization" process of adding (c) subsequently or simultaneously to the combination of (a) and (b). In effect, Chen "preblended" applicants (a) and (c) prior to adding (b). The alternative processes would be expected to produce equivalent products if the same overall amounts are used of each component.

Chen does not explain what metal compounds were used to produce his ionomers.

Sullivan (table 4) shows conventional metal compounds used to neutralize ionomers. It would have been obvious to use any of these metal compounds to produce Chen's ionomers.

Claims 12-15, 22,23,25 and 26 rejected under 35 U.S.C. 103(a) as being unpatentable over the Chen '321 Patent in view of the Statz 2002/0091188 publication in further view of Sullivan '831.

Chen neutralizes his terpolymer prior to adding the fatty acid, rather than neutralizing subsequently or simultaneously with combining the E/acrylate/acid terpolymer and fatty acid.

This "post neutralization" is known to ease processability (see paragraph 48 of the Statz publication). This is because the melt index of the terpolymer decreases upon neutralization. It would have been obvious to first combine the terpolymer and

processability improving fatty acid, rather than add preneutralized ionomer to the fatty acid for the expected advantages.

Chen/Statz do not list applicant's preferred metal supplying compounds (c).

Sullivan (table 4) shown conventional metal compounds used to neutralize ionomers. It would have also been obvious to use any of these metal compounds to carry out the neutralization suggested by Chen/Statz.

Claim 17 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Chen does not disclose wound balls and Statz does not suggest the material as the outer cover

Applicant's arguments filed 5/28/04 have been fully considered but they are not persuasive.

Applicant argues Sullivan '831 is limited to high shore D ionomers rather than the softer ionomers of Statz.

This is not convincing. Sullivan is relied on merely to disclose common metal compounds that will provide the metal ions necessary for neutralization of ionomers. Sullivan is not limited to hard ionomers anyway. Sullivan does exemplify neutralizing "soft" ionomers (col 26 example 1) with MgO.

Applicant's comparison data (C2,C6,C12) does not compare the closest prior art. These comparisons have low neutralizations unlike the cited examples of Statz with high neutralizations. How can these examples show MgO is superior to $Mg(OH)_2$ for

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supplying Mg ions? Applicant's claims place no restriction on the amount of neutralization anyway.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Buttner whose telephone number is 571-272-1084. The examiner can normally be reached on weekdays from 10 to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski, can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DAVID J. BUTTNER
PRIMARY EXAMINER

D. Buttner
November 8, 200

David Buttner